

OIEP

## RAW SEQUENCE LISTING

DATE: 09/18/2001

PATENT APPLICATION: US/09/943,123

TIME: 14:54:18

Input Set : A:\16153-8007.txt

Output Set: N:\CRF3\09182001\I943123.raw

3 <110> APPLICANT: CHANG, Y-H  
 4 VETRO, J.A.  
 5 MICKA, W.S.  
 7 <120> TITLE OF INVENTION: Dominant Negative Variants of Methionine Aminopeptidase  
 8 2 ("MetAP2") and Clinical Uses Therefor  
 10 <130> FILE REFERENCE: 16153-8007  
 C--> 12 <140> CURRENT APPLICATION NUMBER: US/09/943,123  
 C--> 13 <141> CURRENT FILING DATE: 2001-08-30  
 15 <160> NUMBER OF SEQ ID NOS: 26  
 17 <170> SOFTWARE: PatentIn Ver. 2.0  
 19 <210> SEQ ID NO: 1  
 20 <211> LENGTH: 71  
 21 <212> TYPE: PRT  
 22 <213> ORGANISM: Human polylysine  
 24 <400> SEQUENCE: 1  
 25 Lys Lys Lys Arg Arg Lys Lys Lys Lys Ser Lys Gly Pro Ser Ala Ala  
 26 1 5 10 15  
 28 Gly Glu Gln Glu Pro Asp Lys Glu Ser Gly Ala Ser Val Asp Glu Val  
 29 20 25 30  
 31 Ala Arg Gln Leu Glu Arg Ser Ala Leu Glu Asp Lys Glu Arg Asp Glu  
 32 35 40 45  
 34 Asp Asp Glu Asp Gly Asp Gly Asp Gly Ala Thr Gly Lys Lys  
 35 50 55 60  
 37 Lys Lys Lys Lys Lys Lys Lys  
 38 65 70  
 41 <210> SEQ ID NO: 2  
 42 <211> LENGTH: 71  
 43 <212> TYPE: PRT  
 44 <213> ORGANISM: Mouse polylysine  
 46 <400> SEQUENCE: 2  
 47 Lys Lys Lys Arg Arg Lys Lys Lys Lys Gly Lys Gly Ala Val Ser Ala  
 48 1 5 10 15  
 50 Val Gln Gln Glu Leu Asp Lys Glu Ser Gly Ala Leu Val Asp Glu Val  
 51 20 25 30  
 53 Ala Lys Gln Leu Glu Ser Gln Ala Leu Glu Glu Lys Glu Arg Asp Asp  
 54 35 40 45  
 56 Asp Asp Glu Asp Gly Asp Gly Asp Ala Asp Gly Ala Thr Gly Lys Lys  
 57 50 55 60  
 59 Lys Lys Lys Lys Lys Lys Lys  
 60 65 70  
 63 <210> SEQ ID NO: 3  
 64 <211> LENGTH: 57  
 65 <212> TYPE: PRT  
 66 <213> ORGANISM: Saccharomyces polylysine  
 68 <400> SEQUENCE: 3  
 69 Thr Asp Ala Glu Ile Glu Asn Ser Pro Ala Ser Asp Leu Lys Glu Leu  
 70 1 5 10 15

ENTERED

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72 Asn Leu Glu Asn Glu Gly Val Glu Gln Gln Asp Gln Ala Lys Ala Asp
73             20             25             30
75 Glu Ser Asp Pro Val Glu Ser Lys Lys Lys Lys Asn Lys Lys Lys Lys
76             35             40             45
78 Lys Lys Lys Ser Asn Val Lys Lys Ile
79             50             55

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82 &lt;210&gt; SEQ ID NO: 4

83 &lt;211&gt; LENGTH: 35

84 &lt;212&gt; TYPE: DNA

85 &lt;213&gt; ORGANISM: Synthetic oligonucleotide

87 &lt;400&gt; SEQUENCE: 4

88 caaccattgt gctgcagctt tcacacccaa tgcag 35

90 &lt;210&gt; SEQ ID NO: 5

91 &lt;211&gt; LENGTH: 35

92 &lt;212&gt; TYPE: DNA

93 &lt;213&gt; ORGANISM: Artificial Sequence

95 &lt;220&gt; FEATURE:

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96 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic
97     oligonucleotide

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99 &lt;400&gt; SEQUENCE: 5

100 ctgcattggg tgtgaaagct gcagcacaat gggtg 35

102 &lt;210&gt; SEQ ID NO: 6

103 &lt;211&gt; LENGTH: 478

104 &lt;212&gt; TYPE: PRT

105 &lt;213&gt; ORGANISM: Human dnvMetAP2

107 &lt;220&gt; FEATURE:

108 &lt;221&gt; NAME/KEY: SITE

109 &lt;222&gt; LOCATION: (219)

110 &lt;223&gt; OTHER INFORMATION: May be any naturally occurring amino acid

112 &lt;220&gt; FEATURE:

113 &lt;221&gt; NAME/KEY: SITE

114 &lt;222&gt; LOCATION: (231)

115 &lt;223&gt; OTHER INFORMATION: May be any amino acid, except His

117 &lt;220&gt; FEATURE:

118 &lt;221&gt; NAME/KEY: SITE

119 &lt;222&gt; LOCATION: (251)

120 &lt;223&gt; OTHER INFORMATION: May be any naturally occurring amino acid

122 &lt;220&gt; FEATURE:

123 &lt;221&gt; NAME/KEY: SITE

124 &lt;222&gt; LOCATION: (262)

125 &lt;223&gt; OTHER INFORMATION: May be any naturally occurring amino acid

127 &lt;220&gt; FEATURE:

128 &lt;221&gt; NAME/KEY: SITE

129 &lt;222&gt; LOCATION: (328)

130 &lt;223&gt; OTHER INFORMATION: May be any naturally occurring amino acid

132 &lt;220&gt; FEATURE:

133 &lt;221&gt; NAME/KEY: SITE

134 &lt;222&gt; LOCATION: (331)

135 &lt;223&gt; OTHER INFORMATION: May be any naturally occurring amino acid

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Input Set : A:\16153-8007.txt

Output Set: N:\CRF3\09182001\I943123.raw

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137 <220> FEATURE:
138 <221> NAME/KEY: SITE
139 <222> LOCATION: (338)..(339)
140 <223> OTHER INFORMATION: May be any naturally occurring amino acid
142 <220> FEATURE:
143 <221> NAME/KEY: SITE
144 <222> LOCATION: (364)
145 <223> OTHER INFORMATION: May be any naturally occurring amino acid
147 <220> FEATURE:
148 <221> NAME/KEY: SITE
149 <222> LOCATION: (444)
150 <223> OTHER INFORMATION: May be any naturally occurring amino acid
152 <220> FEATURE:
153 <221> NAME/KEY: SITE
154 <222> LOCATION: (447)
155 <223> OTHER INFORMATION: May be any naturally occurring amino acid
157 <220> FEATURE:
158 <221> NAME/KEY: SITE
159 <222> LOCATION: (459)
160 <223> OTHER INFORMATION: May be any naturally occurring amino acid
162 <400> SEQUENCE: 6
163 Met Ala Gly Val Glu Glu Val Ala Ala Ser Gly Ser His Leu Asn Gly
164   1           5           10           15
166 Asp Leu Asp Pro Asp Asp Arg Glu Glu Gly Ala Ala Ser Thr Ala Glu
167           20           25           30
169 Glu Ala Ala Lys Lys Lys Arg Arg Lys Lys Lys Ser Lys Gly Pro
170           35           40           45
172 Ser Ala Ala Gly Glu Gln Glu Pro Asp Lys Glu Ser Gly Ala Ser Val
173           50           55           60
175 Asp Glu Val Ala Arg Gln Leu Glu Arg Ser Ala Leu Glu Asp Lys Glu
176   65           70           75           80
178 Arg Asp Glu Asp Asp Glu Asp Gly Asp Gly Asp Gly Asp Gly Ala Thr
179           85           90           95
181 Gly Lys Lys Lys Lys Lys Lys Lys Lys Lys Arg Gly Pro Lys Val Gln
182           100          105          110
184 Thr Asp Pro Pro Ser Val Pro Ile Cys Asp Leu Tyr Pro Asn Gly Val
185           115          120          125
187 Phe Pro Lys Gly Gln Glu Cys Glu Tyr Pro Pro Thr Gln Asp Gly Arg
188           130          135          140
190 Thr Ala Ala Trp Arg Thr Thr Ser Glu Glu Lys Lys Ala Leu Asp Gln
191 145           150          155          160
193 Ala Ser Glu Glu Ile Trp Asn Asp Phe Arg Glu Ala Ala Glu Ala His
194           165          170          175
196 Arg Gln Val Arg Lys Tyr Val Met Ser Trp Ile Lys Pro Gly Met Thr
197           180          185          190
199 Met Ile Glu Ile Cys Glu Lys Leu Glu Asp Cys Ser Arg Lys Leu Ile
200           195          200          205
W--> 202 Lys Glu Asn Gly Leu Asn Ala Gly Leu Ala Xaa Pro Thr Gly Cys Ser
203           210          215          220

```

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```

W--> 205 Leu Asn Asn Cys Ala Ala Xaa Tyr Thr Pro Asn Ala Gly Asp Thr Thr
      206 225                230                235                240
W--> 208 Val Leu Gln Tyr Asp Asp Ile Cys Lys Ile Xaa Phe Gly Thr His Ile
      209                245                250                255
W--> 211 Ser Gly Arg Ile Ile Xaa Cys Ala Phe Thr Val Thr Phe Asn Pro Lys
      212                260                265                270
      214 Tyr Asp Thr Leu Leu Lys Ala Val Lys Asp Ala Thr Asn Thr Gly Ile
      215                275                280                285
      217 Lys Cys Ala Gly Ile Asp Val Arg Leu Cys Asp Val Gly Glu Ala Ile
      218                290                295                300
      220 Gln Glu Val Met Glu Ser Tyr Glu Val Glu Ile Asp Gly Lys Thr Tyr
      221 305                310                315                320
W--> 223 Gln Val Lys Pro Ile Arg Asn Xaa Asn Gly Xaa Ser Ile Gly Gln Tyr
      224                325                330                335
W--> 226 Arg Xaa Xaa Ala Gly Lys Thr Val Pro Ile Val Lys Gly Gly Glu Ala
      227                340                345                350
W--> 229 Thr Arg Met Glu Glu Gly Glu Val Tyr Ala Ile Xaa Thr Phe Gly Ser
      230                355                360                365
      232 Thr Gly Lys Gly Val Val His Asp Asp Met Glu Cys Ser His Tyr Met
      233                370                375                380
      235 Lys Asn Phe Asp Val Gly His Val Pro Ile Arg Leu Pro Arg Thr Lys
      236 385                390                395                400
      238 His Leu Leu Asn Val Ile Asn Glu Asn Phe Gly Thr Leu Ala Phe Cys
      239                405                410                415
      241 Arg Arg Trp Leu Asp Arg Leu Gly Glu Ser Lys Tyr Leu Met Ala Leu
      242                420                425                430
W--> 244 Lys Asn Leu Cys Asp Leu Gly Ile Val Asp Pro Xaa Pro Pro Xaa Cys
      245                435                440                445
W--> 247 Asp Ile Lys Gly Ser Tyr Thr Ala Gln Phe Xaa His Thr Ile Leu Leu
      248                450                455                460
      250 Arg Pro Thr Cys Lys Glu Val Val Ser Arg Gly Asp Asp Tyr
      251 465                470                475
      254 <210> SEQ ID NO: 7
      255 <211> LENGTH: 478
      256 <212> TYPE: PRT
      257 <213> ORGANISM: Mouse MetAP2
      259 <220> FEATURE:
      260 <221> NAME/KEY: SITE
      261 <222> LOCATION: (219)
      262 <223> OTHER INFORMATION: May be any naturally occurring amino acid
      264 <220> FEATURE:
      265 <221> NAME/KEY: SITE
      266 <222> LOCATION: (231)
      267 <223> OTHER INFORMATION: May be any amino acid, except His
      269 <220> FEATURE:
      270 <221> NAME/KEY: SITE
      271 <222> LOCATION: (251)
      272 <223> OTHER INFORMATION: May be any naturally occurring amino acid
      274 <220> FEATURE:

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Output Set: N:\CRF3\09182001\I943123.raw

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275 <221> NAME/KEY: SITE
276 <222> LOCATION: (262)
277 <223> OTHER INFORMATION: May be any naturally occurring amino acid
279 <220> FEATURE:
280 <221> NAME/KEY: SITE
281 <222> LOCATION: (328)
282 <223> OTHER INFORMATION: May be any naturally occurring amino acid
284 <220> FEATURE:
285 <221> NAME/KEY: SITE
286 <222> LOCATION: (331)
287 <223> OTHER INFORMATION: May be any naturally occurring amino acid
289 <220> FEATURE:
290 <221> NAME/KEY: SITE
291 <222> LOCATION: (338)..(339)
292 <223> OTHER INFORMATION: May be any naturally occurring amino acid
294 <220> FEATURE:
295 <221> NAME/KEY: SITE
296 <222> LOCATION: (364)
297 <223> OTHER INFORMATION: May be any naturally occurring amino acid
299 <220> FEATURE:
300 <221> NAME/KEY: SITE
301 <222> LOCATION: (444)
302 <223> OTHER INFORMATION: May be any naturally occurring amino acid
304 <220> FEATURE:
305 <221> NAME/KEY: SITE
306 <222> LOCATION: (447)
307 <223> OTHER INFORMATION: May be any naturally occurring amino acid
309 <220> FEATURE:
310 <221> NAME/KEY: SITE
311 <222> LOCATION: (459)
312 <223> OTHER INFORMATION: May be any naturally occurring amino acid
314 <400> SEQUENCE: 7
315 Met Ala Gly Val Glu Gln Ala Ala Ser Phe Gly Gly His Leu Asn Gly
316   1           5           10           15
318 Asp Leu Asp Pro Asp Asp Arg Glu Glu Gly Thr Ser Ser Thr Ala Glu
319           20           25           30
321 Glu Ala Ala Lys Lys Lys Arg Arg Lys Lys Lys Lys Gly Lys Gly Ala
322           35           40           45
324 Val Ser Ala Val Gln Gln Glu Leu Asp Lys Glu Ser Gly Ala Leu Val
325           50           55           60
327 Asp Glu Val Ala Lys Gln Leu Glu Ser Gln Ala Leu Glu Glu Lys Glu
328   65           70           75           80
330 Arg Asp Asp Asp Asp Glu Asp Gly Asp Gly Asp Ala Asp Gly Ala Thr
331           85           90           95
333 Gly Lys Lys Lys Lys Lys Lys Lys Lys Arg Gly Pro Lys Val Gln
334           100          105          110
336 Thr Asp Pro Pro Ser Val Pro Ile Cys Asp Leu Tyr Pro Asn Gly Val
337           115          120          125
339 Phe Pro Lys Gly Gln Glu Cys Glu Tyr Pro Pro Thr Gln Asp Gly Arg

```

Use of n and / or Xaa has been detected in the Sequence Listing. Review the Sequence Listing to ensure a corresponding explanation is present in the <220> to <223> fields of each sequence using n or Xaa.

## VERIFICATION SUMMARY

PATENT APPLICATION: US/09/943,123

DATE: 09/18/2001

TIME: 14:54:19

Input Set : A:\16153-8007.txt

Output Set: N:\CRF3\09182001\I943123.raw

L:12 M:270 C: Current Application Number differs, Replaced Application Number

L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:202 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6

L:205 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6

L:208 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6

L:211 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6

L:223 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6

L:226 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6

L:229 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6

L:244 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6

L:247 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6

L:354 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7

L:357 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7

L:360 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7

L:363 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7

L:375 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7

L:378 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7

L:381 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7

L:396 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7

L:399 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7

L:497 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8

L:503 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8

L:515 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8

L:518 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8

L:524 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8

L:539 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8

L:542 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8

L:571 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9

L:607 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10

L:640 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11

L:1062 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16

L:1065 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16

L:1068 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16

L:1071 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16

L:1083 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16

L:1086 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16

L:1089 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16

L:1104 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16

L:1107 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16

L:1240 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18